

Abstract of the Disclosure

A developing process of the photo-resist coated on the wafer is performed, cleaning the developing solution by a cleaning solution then transferring the wafer to the electron beam radiation unit before the rinsing solution and the resist dries out. The radiation chamber is replaced with a helium gas to form a predetermined degree of vacuum or atmospheric pressure. An electron beam is radiated and the front face of the wafer is heated for a predetermined period of time. In this method, deformation and breaking of a pattern caused by drying after the development can be prevented.